

United States Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, MA 02114-2023

January 7, 2002

Mr. Andrew T. Silfer, P.E.
Corporate Environmental Programs
General Electric Company
100 Woodlawn Avenue
Pittsfield, Massachusetts 01201

**RE: Interim Conditional Approval of GE's submittal entitled *Results of Cell J1 DNAPL Investigation and Proposal to Address Presence of DNAPL in Cell J1*
Upper ½-Mile Reach Removal Action
General Electric-Housatonic River Site, Pittsfield, Massachusetts**

Dear Mr. Silfer:

On November 28, 2001, GE submitted a document entitled *Results of Cell J1 DNAPL Investigation and Proposal to Address Presence of DNAPL in Cell J1*. On December 17, 2001, EPA issued a response that conditionally approved the installation of the sheetpile component of GE's proposal. The proposed excavation and monitoring activities were not approved by the December 17, 2001 letter. Rather, the EPA response letter directed GE to perform additional investigative activities and to resubmit the results of the activities, and, if appropriate, propose modifications to the proposed excavation plan. On January 2, 2002, in response to EPA's December 17, 2001 letter, GE submitted a revised Figure 2. This Figure identifies the estimated elevation of the apparent confining layer as determined by in-river borings.

The November 28, 2001 document and the January 2, 2002 supplemental submittal are subject to the terms and conditions specified in the Consent Decree that was entered in District Court on October 27, 2000 (the "Consent Decree"). Pursuant to the Upper ½-Mile Reach Removal Action Work Plan and Paragraph 73.b of the Consent Decree, EPA, after consulting with the Massachusetts DEP, is providing interim conditional approval only for the excavation and restoration components of the above-referenced submittals subject to the conditions outlined below. EPA's review of the groundwater monitoring activities proposed in the November 28, 2001 submittal is ongoing and an approval letter will be issued at a later date for GE's groundwater monitoring activities.

Conditions on proposed excavation activities.

1. If any NAPL-impacted bank soils are encountered outside the limits of the Waterloo sheetpile wall, then additional response actions may be required.
2. If NAPL or NAPL-impacted sediments or bank soils are observed at the base of the excavation, and GE (or their contractors) determines that it is unsafe or impractical to perform additional excavation given the current conditions, then EPA may require GE to implement additional actions to allow for such excavation to be performed. These actions may include, but are not limited to, the installation of additional sheetpile, bracing, tie backs, and subsurface grouting.

Note that the EPA does not necessarily concur with the estimated elevation of the apparent confining layer depicted on the revised Figure 2. For example, the boring log for one of the three borings advanced at location J1-SB-19 indicated that free-phase NAPL and the apparent confining layer may be three to four feet below the elevation shown on this Figure. Therefore, as discussed in the January 2, 2002 on-site weekly meeting, EPA believes that it is likely that GE will have to excavate below elevation 963 feet AMSL in at least this location. EPA did concur with allowing GE to initiate excavation activities without additional sheetpile installation and/or bracing in order to more accurately determine, where, if it at all, it is necessary to excavate below the currently proposed maximum excavation depths. At that point, a specific plan can be developed to allow for the necessary excavation activities to be performed.

3. If NAPL-impacted sediments and bank soils are observed to extend beyond the lateral limits shown in Figure 2 of the November 28, 2001 submittal, then GE shall extend the excavation beyond these limits.
4. GE may install stone, gravel, or other backfill at the base of the excavation to allow for appropriate water management and control, however, GE shall ensure that the minimum backfill capping layer thicknesses are installed. For example, in NAPL-impacted areas, the minimum thicknesses are three feet of isolation layer material and one foot of armor stone. GE shall perform sufficient surveying to confirm the limits of excavation and backfill layer thicknesses.
5. If a recovery system is necessary, the specific components, locations and other details of the recovery/cap system shall be discussed and agreed to by EPA prior to installation.

The above-listed requirements are the minimum requirements that GE shall meet. However, this conditional approval letter does not waive or modify any of the Performance Standards specified in the Upper ½-Mile Reach Removal Action Work Plan or the Consent Decree, or any requirements associated with such Performance Standards. As you know, Section 4.2 -- Non-

Aqueous Phase Liquid Standards of Technical Attachment H of Appendix E to the Consent Decree includes, among other things, the following Performance Standards:

- "Containment, defined as no discharge of NAPL to surface water and/or sediments, which shall include no sheens on surface water and no bank seeps of NAPL."
- "For areas near surface waters in which there is no physical containment barrier between the wells and the surface water, elimination of measurable NAPL (i.e., detectable with an oil/water interface probe) in wells near the surface water bank that could potentially discharge NAPL into the surface water, in order to prevent such discharge and assist in achieving groundwater quality Performance Standards."
- "For areas adjacent to physical contamination barriers, prevention of any measurable LNAPL migration around the ends of the physical containment barriers."

Furthermore, EPA's conditional approval of this submittal does not preclude EPA from requiring additional investigations and response activities pursuant to the Consent Decree, the Upper ½-Mile Reach Removal Action Work Plan and/or the *Statement of Work for Removal Actions Outside the River* (Appendix E to the Consent Decree) in the future.

If you have any questions, please contact me at (617) 918-1282.

Sincerely,



Dean Tagliaferro

cc: Tim Conway, EPA
Bryan Olson, EPA
Mike Nalipinski, EPA
Holly Inglis, EPA
J. Lyn Cutler, DEP
Sue Steenstrup, DEP
Mark Gravelding, BBL
Dawn Jamros, Weston
Site File